

Abstract

A method for synthesizing cDNA possessing a consecutive sequence starting with a nucleotide adjacent to a cap structure of mRNA, which comprises (i) a process for
5 annealing a double-stranded DNA primer and an RNA mixture containing mRNA possessing a cap structure, (ii) a process for preparing a conjugate of an mRNA/cDNA heteroduplex and a double-stranded DNA primer by synthesizing the first-strand cDNA primed with the double-stranded DNA primer using reverse transcriptase, and (iii) a
10 process for circularizing the conjugate of the mRNA/cDNA heteroduplex and the double-stranded DNA primer by joining the 3' and 5' ends of the DNA strand containing cDNA using ligase. This method enables us to efficiently synthesize a full-length cDNA possessing a consecutive sequence starting with a transcription-start-site nucleotide from a small amount of RNA by small processes.